# (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

# (19) World Intellectual Property Organization International Bureau





(43) International Publication Date 21 October 2004 (21.10.2004)

**PCT** 

(10) International Publication Number WO 2004/089198 A2

(51) International Patent Classification<sup>7</sup>:

\_\_\_

A61B 3/00

(21) International Application Number:

PCT/CA2004/000537

(22) International Filing Date:

8 April 2004 (08.04.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 60/461,833

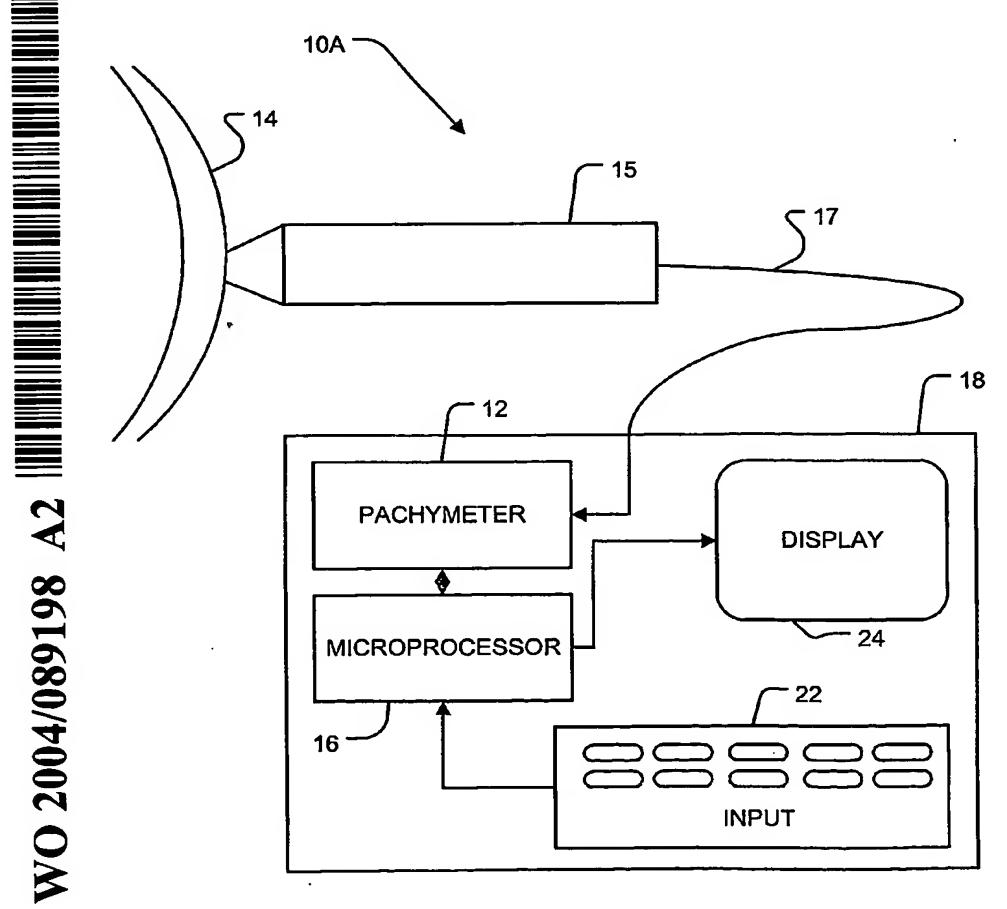
11 April 2003 (11.04.2003) US

(71) Applicant (for all designated States except US):
PORTABLE OPHTHALMIC DEVICES, INC.
[CA/US]; 4374 State Street, Unit 1A, Bettendorf, IA
52722 (US).

- (72) Inventors; and
- (75) Inventors/Applicants (for US only): PHILLIPS, Scott [CA/CA]; 2050 Lorne Terrace, Victoria, British Columbia V8S 2H8 (CA). HANSEN, Bjarne [CA/CA]; 1000 De Costa Place, Victoria, British Columbia V8T 5H8 (CA). EHRECKE, Timothy [US/US]; 4413 Winston Place, Bettendorf, IA 52722-7202 (US).
- (74) Agents: MANNING, Gavin et al.; 480 601 West Cordova Street, Vancouver, British Columbia V6B 1G1 (CA).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,

[Continued on next page]

(54) Title: PACHYMETER



(57) Abstract: A pachymeter measuring apparatus corneal thickness is configured calculation of the for intraocular pressure ("IOP"). The apparatus includes a pachymeter for measuring corneal thickness as well as a microprocessor and a user interface. A reading of IOP from a tonometer can be entered into the device corrected according to and the pachymeter reading of corneal thickness. Correction algorithms are user selectable and user customizable. may have a pachymeter display graphical which displays multiple locations at which measurements are to be taken. A pachymeter may use a capacitor charged by a variable current supply to measure times for signals to be reflected from a back side of a comea.

#### 

TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

### Declaration under Rule 4.17:

— of inventorship (Rule 4.17(iv)) for US only

## Published:

without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.